	Θ	Jax-cosmo + NUTS				Jax-cosmo + EMCEE				Jax-cosmo + NS				CCL + EMCEE		Jax-cosmo + Barker MH			
		$\hat{R}_{\text{emu}}$	$\hat{R}_{\text{EH}}$	$N_{\text{eff, emu}}$	$N_{\text{eff, EH}}$	$\hat{R}_{\text{emu}}$	$\hat{R}_{\text{EH}}$	$N_{\text{eff, emu}}$	$N_{\text{eff, EH}}$	$\hat{R}_{\text{emu}}$	$\hat{R}_{\text{EH}}$	$N_{\text{eff, emu}}$	$N_{\text{eff, EH}}$	$\hat{R}$	N_{eff}	$\hat{R}_{\text{emu}}$	$\hat{R}_{\text{EH}}$	$N_{\text{eff, emu}}$	$N_{\text{eff, EH}}$
Cosmology	σ_8	1.01	1.01	136.37	145.24	1.01	1.01	1825.25	7003.56					1.02	176.14	1.49	1.35	6.48	8.87
	Ω_c	1.01	1.01	152.08	185.56	1.00	1.01	819829.74	7856.06					1.01	829.57	1.21	1.01	10.78	41.67
	Ω_b	1.00	1.02	269.22	167.30	1.00	1.00	565940.15	829352.51					1.00	414421.28	1.03	1.04	11.90	11.34
	h	1.01	1.00	208.76	548.84	1.01	1.00	1124.50	10462.94					1.00	431621.28	1.43	1.61	8.10	8.11
	n_s	1.01	1.01	307.28	178.89	1.00	1.00	911044.39	4107.11					1.01	427951.22	1.13	1.05	8.99	13.06
Multiplicative	m_1	1.00	1.00	28836.75	30738.04	1.00	1.01	384.49	280.75					1.00	10168.659	1.00	1.00	3463.49	2100.02
	m_2	1.00	1.00	27551.48	29054.72	1.01	1.03	110.29	43.32					1.00	139.68	1.00	1.00	3188.36	2086.72
	m_3	1.00	1.00	17718.36	20889.98	1.02	1.01	178.65	259.15					1.00	158.05	1.01	1.00	2053.72	1453.72
	m_4	1.00	1.00	16858.58	24410.81	1.02	1.01	92.38	140.15					1.00	77.65	1.01	1.00	2462.37	1685.12
Shifts (WL)	$\delta_\gamma^{(1)}$	1.00	1.00	10830.52	12388.48	1.01	1.00	354.21	838852.21					1.00	451156.69	1.02	1.01	885.64	807.58
	$\delta_\gamma^{(2)}$	1.00	1.00	26477.66	28672.85	1.02	1.04	80.61	50.78					1.00	321.24	1.00	1.00	10863.74	7078.01
	$\delta_\gamma^{(3)}$	1.00	1.00	20919.52	22335.71	1.00	1.02	4636.01	301.44					1.01	368398.61	1.01	1.02	2439.80	1182.63
	$\delta_\gamma^{(4)}$	1.00	1.00	14754.05	17966.16	1.00	1.01	815803.00	2813.87					1.00	271119.26	1.01	1.02	1491.92	859.00
IA	A_{IA}	1.00	1.00	2158.91	1599.41	1.01	1.01	812539.57	790999.70					1.00	360396.32	1.24	1.25	9.02	7.64
	η	1.00	1.01	418.44	264.99	1.00	1.00	1045647.28	936146.61					1.00	433130.23	2.45	2.15	5.24	5.36
Bias	b_1	1.00	1.01	218.60	235.63	1.00	1.01	7917.76	551340.67					1.01	1402.98	1.13	1.06	32.48	39.49
	b_2	1.00	1.01	187.30	200.98	1.01	1.02	2291.05	324.49					1.02	211.90	1.32	1.29	10.53	14.39
	b_3	1.00	1.01	193.96	201.39	1.02	1.01	384.65	2410.06					1.02	229.59	1.28	1.21	9.77	16.99
	b_4	1.00	1.01	189.77	207.16	1.01	1.01	620.06	3713.53					1.02	177.31	1.30	1.23	10.52	10.94
	b_5	1.00	1.01	217.81	226.61	1.02	1.02	236.00	646.41					1.02	224.11	1.30	1.33	10.42	10.85
Shifts (GC)	$\delta_g^{(1)}$	1.00	1.00	26467.60	27603.76	1.01	1.01	613.95	827.45					1.01	1438.75	1.00	1.00	1578.74	1672.30
	$\delta_g^{(2)}$	1.00	1.00	29915.64	27571.26	1.01	1.00	968.26	952927.41					1.02	376.29	1.00	1.00	3100.59	2746.75
	$\delta_g^{(3)}$	1.00	1.00	28107.70	28512.20	1.00	1.01	5125.06	1764.30					1.00	385948.53	1.00	1.00	6386.17	3542.15
	$\delta_g^{(4)}$	1.00	1.00	25489.90	26892.06	1.00	1.01	928214.35	829.39					1.00	2098.08	1.00	1.00	3877.96	3095.35
	$\delta_g^{(5)}$	1.00	1.00	28271.45	26376.54	1.01	1.00	577528.25	5826.78					1.00	6760.60	1.00	1.00	5039.44	5183.86

Table 1: Sampler diagnostics - NUTS ($N_{\text{samples}} = 15000$, $\varepsilon = 0.1$, $N_{\text{step}} = 31$, time ~ 20 hours), EMCEE ($N_{\text{samples}} = 10000$, $N_{\text{walkers}} = 50$, $\varepsilon = 10^{-4}$, time ~ 7 hours 15 minutes), Barker ($N_{\text{samples}} = 150000$, $N_{\text{walkers}} = 1000$, time ~ 6 hours 45 minutes), CCL ($N_{\text{samples}} = 10000$, $N_{\text{walkers}} = 50$, $\varepsilon = 10^{-4}$, time ~ 36 hours)

	Θ	Jax-cosmo + NUTS				Jax-cosmo + EMCEE				Jax-cosmo + NS				CCL + EMCEE		Jax-cosmo + Barker MH			
		μ_{emu}	σ_{emu}	μ_{EH}	σ_{EH}	μ_{emu}	σ_{emu}	μ_{EH}	σ_{EH}	μ_{emu}	σ_{emu}	μ_{EH}	σ_{EH}	μ	σ	μ_{emu}	σ_{emu}	μ_{EH}	σ_{EH}
Cosmology	σ_8	0.839	0.064	0.834	0.067	0.848	0.062	0.833	0.060					0.821	0.062	0.819	0.030	0.799	0.029
	Ω_c	0.230	0.024	0.227	0.026	0.228	0.022	0.228	0.025					0.235	0.026	0.238	0.013	0.240	0.011
	Ω_b	0.043	0.007	0.045	0.007	0.043	0.007	0.045	0.007					0.046	0.007	0.045	0.003	0.047	0.003
	h	0.716	0.051	0.711	0.050	0.717	0.050	0.710	0.050					0.708	0.048	0.727	0.018	0.721	0.015
	n_s	0.957	0.056	0.964	0.057	0.958	0.056	0.960	0.056					0.953	0.054	0.950	0.022	0.959	0.016
Multiplicative	m_1	0.012	0.023	0.012	0.023	0.015	0.025	0.015	0.025					0.012	0.023	0.012	0.023	0.012	0.023
	m_2	0.011	0.022	0.011	0.023	0.015	0.031	0.019	0.035					0.013	0.029	0.012	0.023	0.012	0.023
	m_3	0.019	0.022	0.018	0.022	0.015	0.024	0.016	0.025					0.015	0.025	0.019	0.021	0.020	0.022
	m_4	0.009	0.022	0.008	0.022	0.004	0.029	0.004	0.026					0.003	0.029	0.009	0.021	0.010	0.021
Shifts (WL)	$\delta_\gamma^{(1)}$	-0.002	0.015	-0.002	0.015	-0.003	0.016	-0.002	0.015					-0.003	0.015	-0.001	0.015	-0.002	0.015
	$\delta_\gamma^{(2)}$	-0.029	0.011	-0.029	0.012	-0.031	0.015	-0.032	0.015					-0.031	0.013	-0.028	0.011	-0.027	0.011
	$\delta_\gamma^{(3)}$	0.007	0.010	0.007	0.010	0.007	0.011	0.007	0.011					0.007	0.010	0.008	0.010	0.009	0.010
	$\delta_\gamma^{(4)}$	-0.020	0.020	-0.020	0.020	-0.020	0.019	-0.021	0.021					-0.020	0.021	-0.020	0.019	-0.019	0.019
IA	A_{IA}	0.356	0.184	0.353	0.184	0.374	0.179	0.372	0.167					0.365	0.167	0.550	0.120	0.568	0.122
	η	-0.003	2.579	-0.116	2.583	0.107	2.079	0.045	2.110					-0.030	2.256	0.104	1.820	0.381	1.487
Bias	b_1	1.382	0.124	1.372	0.133	1.371	0.118	1.373	0.123					1.409	0.129	1.419	0.084	1.447	0.075
	b_2	1.694	0.129	1.681	0.144	1.678	0.125	1.675	0.134					1.714	0.143	1.742	0.076	1.774	0.070
	b_3	1.652	0.121	1.643	0.136	1.632	0.117	1.642	0.122					1.674	0.134	1.696	0.071	1.728	0.066
	b_4	2.044	0.151	2.027	0.167	2.020	0.146	2.027	0.153					2.064	0.167	2.096	0.089	2.136	0.091
	b_5	2.080	0.160	2.066	0.176	2.049	0.158	2.064	0.164					2.104	0.172	2.138	0.098	2.180	0.098
Shifts (GC)	$\delta_g^{(1)}$	0.001	0.007	0.001	0.007	0.001	0.007	0.001	0.007					0.002	0.007	0.000	0.007	0.000	0.007
	$\delta_g^{(2)}$	0.002	0.007	0.002	0.007	0.002	0.007	0.002	0.007					0.001	0.007	0.001	0.007	0.002	0.007
	$\delta_g^{(3)}$	0.002	0.007	0.002	0.006	0.003	0.006	0.003	0.007					0.002	0.006	0.003	0.006	0.002	0.006
	$\delta_g^{(4)}$	0.002	0.009	0.003	0.009	0.003	0.010	0.003	0.010					0.003	0.010	0.002	0.009	0.002	0.009
	$\delta_g^{(5)}$	0.000	0.010	-0.001	0.010	-0.001	0.010	-0.001	0.010					0.000	0.011	-0.001	0.010	-0.001	0.010

Table 2: Summary statistics of all the parameters