

Table S1: Data of Figure 1(a).

b=0.01		b=0.02		b=0.05		b=0.1	
t^*	R^*	t^*	R^*	t^*	R^*	t^*	R^*
0	1	0	1	0	1	0	1
600	1.51072	400	1.51072	300	1.51072	150	1.51072
1200	1.51072	800	1.51072	600	1.51072	300	1.51072
1800	1.51072	1200	1.51072	900	1.51072	450	1.51072
3600	1.51072	1600	1.51072	1800	1.64788	900	1.64788
4200	1.51072	2000	1.51072	2100	1.74079	1050	1.74079
4800	1.51072	2400	1.51072	2400	1.82004	1200	1.82004
5400	1.51072	2800	1.51072	2700	1.88832	1350	1.88832
6000	1.51072	3200	1.51072	3000	1.94794	1500	1.94794
6600	1.51072	3600	1.51889	3300	2.0007	1650	2.0007
7200	1.51889	4000	1.57965	3600	2.04006	1800	2.04006
7800	1.5648	4400	1.63639	3900	2.04006	1950	2.04006
8400	1.60856	4800	1.68873	4200	2.04006	2100	2.04006
9000	1.64989	5200	1.73678	4500	2.04006	2250	2.04006
9600	1.68873	5600	1.7809	4800	2.04006	2400	2.04006
10200	1.72515	6000	1.82151	5100	2.04006	2550	2.04006
10800	1.7593	6400	1.85902	5400	2.04006	2700	2.04006
11400	1.79136	6800	1.8938	5700	2.04006	2850	2.04006
12000	1.82151	7200	1.92618	6000	2.04006	3000	2.04006
12600	1.84991	8000	1.98482	6300	2.04006	3150	2.04006
13200	1.87673	8400	2.01153	6600	2.04006	3300	2.04006
13800	1.90211	8800	2.03673	6900	2.04006	3450	2.04006
14400	1.92618	9200	2.04006	7200	2.04006	3600	2.04006
15000	1.94906	9600	2.04006	7500	2.04006	3750	2.04006
15600	1.97085	10000	2.04006	7800	2.04006	3900	2.04006
16200	1.99165	11200	2.04006	8100	2.04006	4050	2.04006
16800	2.01153	12400	2.04006	8400	2.04006	4200	2.04006
17400	2.03056	13600	2.04006	8700	2.04006	4350	2.04006
18000	2.04006	14800	2.04006	9000	2.04006	4500	2.04006
18600	2.04006	16000	2.04006	9300	2.04006	4650	2.04006
19200	2.04006	17200	2.04006	9600	2.04006	4800	2.04006
19800	2.04006	18400	2.04006	9900	2.04006	4950	2.04006
20000	2.04006	19600	2.04006	10000	2.04006	5000	2.04006
□	□	20000	2.04006	□	□	□	□

Table S2: Data of Figure 1(b).

b=0.01				b=0.05			
t^*	$\bar{\phi}$	t^*	$\bar{\phi}$	t^*	$\bar{\phi}$	t^*	$\bar{\phi}$
0	0.586	1000	0.16996	0	0.586	1000	0.16996
0.25	0.3953	2000	0.16996	0.25	0.3953	2000	0.11752
0.5	0.31567	3000	0.16996	0.5	0.31567	3000	0.07951
0.75	0.25894	4000	0.16996	0.75	0.25894	4000	0.06902
1	0.22077	5000	0.16996	1	0.22076	5000	0.06902
1.25	0.19721	6000	0.16996	1.25	0.1972	6000	0.06902
1.5	0.18379	7000	0.16996	1.5	0.18378	7000	0.06902
1.75	0.17668	8000	0.14867	1.75	0.17668	8000	0.06902
2	0.17314	9000	0.13048	2	0.17313	9000	0.06902
2.25	0.17144	10000	0.11653	2.25	0.17144	10000	0.06902
2.5	0.17064	11000	0.10564	2.5	0.17064	11000	0.06902
2.75	0.17027	12000	0.09696	2.75	0.17027	12000	0.06902
3	0.1701	13000	0.08991	3	0.1701	13000	0.06902
3.25	0.17003	14000	0.08406	3.25	0.17003	14000	0.06902
3.5	0.16999	15000	0.07914	3.5	0.16999	15000	0.06902
3.75	0.16997	16000	0.07494	3.75	0.16997	16000	0.06902
4	0.16997	17000	0.07131	4	0.16997	17000	0.06902
4.25	0.16996	18000	0.06902	4.25	0.16996	18000	0.06902
4.5	0.16996	19000	0.06902	4.5	0.16996	19000	0.06902
4.75	0.16996	20000	0.06902	4.75	0.16996	20000	0.06902
5	0.16996	□	□	5	0.16996	□	□

Table S3: Data of Figure 2(a).

T	ϕ_{eq}	T	ϕ_{eq}	T	ϕ_{eq}	T	ϕ_{eq}
323	0.16869	333.4	0.16869	343.8	0.12616	354.2	0.08442
323.8	0.16869	334.2	0.16869	344.6	0.12115	355	0.08254
324.6	0.16869	335	0.16869	345.4	0.11656	355.8	0.08077
325.4	0.16869	335.8	0.16869	346.2	0.11237	356.6	0.0791
326.2	0.16869	336.6	0.16869	347	0.10852	357.4	0.07753
327	0.16869	337.4	0.16869	347.8	0.10497	358.2	0.07603
327.8	0.16869	338.2	0.16869	348.6	0.1017	359	0.07461
328.6	0.16869	339	0.16869	349.4	0.09867	359.8	0.07327
329.4	0.16869	339.8	0.1598	350.2	0.09586	360.6	0.07199
330.2	0.16869	340.6	0.15172	351	0.09325	361.4	0.07077
331	0.16869	341.4	0.14439	351.8	0.09082	362.2	0.06961
331.8	0.16869	342.2	0.13772	352.6	0.08855	363	0.0685
332.6	0.16869	343	0.13167	353.4	0.08642	□	□

Table S4: Data of Figure 2(b).

ν^*	$\phi_{eq}(T_0)$	χ_0	$\phi_{eq}(T_0)$	ν^*	$\phi_{eq}(T_0)$	χ_0	$\phi_{eq}(T_0)$
0.004	0.16725	0	0.05248	0.14067	0.51453	0.27778	0.07997
0.01642	0.26916	0.02525	0.054	0.15309	0.52647	0.30303	0.08463
0.02885	0.32235	0.05051	0.05563	0.16552	0.53761	0.32828	0.09004
0.04127	0.36028	0.07576	0.05741	0.17794	0.54805	0.35354	0.09638
0.0537	0.39024	0.10101	0.05933	0.19036	0.55788	0.37879	0.10391
0.06612	0.41518	0.12626	0.06144	0.20279	0.56715	0.40404	0.11298
0.07855	0.43664	0.15152	0.06375	0.21521	0.57594	0.42929	0.12406
0.09097	0.45552	0.17677	0.06631	0.22764	0.58429	0.45455	0.13775
0.10339	0.4724	0.20202	0.06915	0.24006	0.59224	0.4798	0.15479
0.11582	0.48768	0.22727	0.07232	0.25	0.59833	0.5	0.17132
0.12824	0.50165	0.25253	0.0759	□	□	□	□

Table S5: Data of Figure 3(a).

modified logistic		linear		neg-exp		step	
T	ν^*	T	ν^*	T	ν^*	T	ν^*
323	0.23	323	0.23	323	0.23	323	0.23
323.8	0.23	323.8	0.23	323.8	0.23	325	0.23
324.6	0.23	324.6	0.23	324.6	0.23	327	0.23
325.4	0.23	325.4	0.23	325.4	0.23	329	0.23
326.2	0.23	326.2	0.23	326.2	0.23	331	0.23
327	0.23	327	0.23	327	0.23	333	0.23
327.8	0.23	327.8	0.23	327.8	0.23	335	0.23
328.6	0.23	328.6	0.23	328.6	0.23	337	0.23
329.4	0.23	329.4	0.23	329.4	0.23	339	0.23
330.2	0.23	330.2	0.23	330.2	0.23	341	0.0041
331	0.23	331	0.23	331	0.23	343	0.0041
331.8	0.23	331.8	0.23	331.8	0.23	345	0.0041
332.6	0.23	332.6	0.23	332.6	0.23	347	0.0041
333.4	0.23	333.4	0.23	333.4	0.23	349	0.0041
334.2	0.23	334.2	0.23	334.2	0.23	351	0.0041
335	0.23	335	0.23	335	0.23	353	0.0041
335.8	0.23	335.8	0.23	335.8	0.23	355	0.0041
336.6	0.23	336.6	0.23	336.6	0.23	357	0.0041
337.4	0.23	337.4	0.23	337.4	0.23	359	0.0041
338.2	0.23	338.2	0.23	338.2	0.23	361	0.0041
339	0.23	339	0.23	339	0.23	363	0.0041
339.8	0.22898	339.8	0.198	339.8	0.18532	□	□
340.6	0.22611	340.6	0.166	340.6	0.13179		

341.4	0.21911	341.4	0.134	341.4	0.06768	constant	
342.2	0.20398	342.2	0.102	342.2	0.0041	T	ν^*
343	0.17607	343	0.07	343	0.0041	323	0.0041
343.8	0.13505	343.8	0.038	343.8	0.0041	363	0.0041
344.6	0.08998	344.6	0.006	344.6	0.0041		
345.4	0.05331	345.4	0.0041	345.4	0.0041	□	□
346.2	0.02982	346.2	0.0041	346.2	0.0041	□	□
347	0.01689	347	0.0041	347	0.0041	□	□
347.8	0.01032	347.8	0.0041	347.8	0.0041	□	□
348.6	0.0071	348.6	0.0041	348.6	0.0041	□	□
349.4	0.00555	349.4	0.0041	349.4	0.0041	□	□
350.2	0.0048	350.2	0.0041	350.2	0.0041	□	□
351	0.00444	351	0.0041	351	0.0041	□	□
351.8	0.00427	351.8	0.0041	351.8	0.0041	□	□
352.6	0.00418	352.6	0.0041	352.6	0.0041	□	□
353.4	0.00414	353.4	0.0041	353.4	0.0041	□	□
354.2	0.00412	354.2	0.0041	354.2	0.0041	□	□
355	0.00411	355	0.0041	355	0.0041	□	□
355.8	0.0041	355.8	0.0041	355.8	0.0041	□	□
356.6	0.0041	356.6	0.0041	356.6	0.0041	□	□
357.4	0.0041	357.4	0.0041	357.4	0.0041	□	□
358.2	0.0041	358.2	0.0041	358.2	0.0041	□	□
359	0.0041	359	0.0041	359	0.0041	□	□
359.8	0.0041	359.8	0.0041	359.8	0.0041	□	□
360.6	0.0041	360.6	0.0041	360.6	0.0041	□	□
361.4	0.0041	361.4	0.0041	361.4	0.0041	□	□
362.2	0.0041	362.2	0.0041	362.2	0.0041	□	□
363	0.0041	363	0.0041	363	0.0041	□	□

Table S6: Data of Figure 3(b).

linear		neg-exp		modified logistic		step		constant	
T	ϕ_{eq}	T	ϕ_{eq}	T	ϕ_{eq}	T	ϕ_{eq}	T	ϕ_{eq}
323	0.58583	323	0.58583	323	0.58583	323	0.58583	323	0.16869
323.8	0.58583	323.8	0.58583	323.8	0.58583	323.8	0.58583	323.8	0.16869
324.6	0.58583	324.6	0.58583	324.6	0.58583	324.6	0.58583	324.6	0.16869
325.4	0.58583	325.4	0.58583	325.4	0.58583	325.4	0.58583	325.4	0.16869
326.2	0.58583	326.2	0.58583	326.2	0.58583	326.2	0.58583	326.2	0.16869
327	0.58583	327	0.58583	327	0.58583	327	0.58583	327	0.16869
327.8	0.58583	327.8	0.58583	327.8	0.58583	327.8	0.58583	327.8	0.16869
328.6	0.58583	328.6	0.58583	328.6	0.58583	328.6	0.58583	328.6	0.16869
329.4	0.58583	329.4	0.58583	329.4	0.58583	329.4	0.58583	329.4	0.16869

330.2	0.58583	330.2	0.58583	330.2	0.58583	330.2	0.58583	330.2	0.16869
331	0.58583	331	0.58583	331	0.58583	331	0.58583	331	0.16869
331.8	0.58583	331.8	0.58583	331.8	0.58583	331.8	0.58583	331.8	0.16869
332.6	0.58583	332.6	0.58583	332.6	0.58583	332.6	0.58583	332.6	0.16869
333.4	0.58583	333.4	0.58583	333.4	0.58583	333.4	0.58583	333.4	0.16869
334.2	0.58583	334.2	0.58583	334.2	0.58583	334.2	0.58583	334.2	0.16869
335	0.58583	335	0.58583	335	0.58583	335	0.58583	335	0.16869
335.8	0.58583	335.8	0.58583	335.8	0.58583	335.8	0.58583	335.8	0.16869
336.6	0.58583	336.6	0.58583	336.6	0.58583	336.6	0.58583	336.6	0.16869
337.4	0.58583	337.4	0.58583	337.4	0.58583	337.4	0.58583	337.4	0.16869
338.2	0.58583	338.2	0.58583	338.2	0.58583	338.2	0.58583	338.2	0.16869
339	0.58583	339	0.58583	339	0.58583	339	0.58583	339	0.16869
339.8	0.55902	339.8	0.54923	339.8	0.58078	339.8	0.1598	339.8	0.1598
340.6	0.52828	340.6	0.49497	340.6	0.57452	340.6	0.15172	340.6	0.15172
341.4	0.49224	341.4	0.39971	341.4	0.56537	341.4	0.14439	341.4	0.14439
342.2	0.44853	342.2	0.13772	342.2	0.55001	342.2	0.13772	342.2	0.13772
343	0.39254	343	0.13167	343	0.52304	343	0.13167	343	0.13167
343.8	0.31247	343.8	0.12616	343.8	0.47857	343.8	0.12616	343.8	0.12616
344.6	0.14405	344.6	0.12115	344.6	0.41551	344.6	0.12115	344.6	0.12115
345.4	0.11656	345.4	0.11656	345.4	0.34154	345.4	0.11656	345.4	0.11656
346.2	0.11237	346.2	0.11237	346.2	0.26913	346.2	0.11237	346.2	0.11237
347	0.10852	347	0.10852	347	0.20826	347	0.10852	347	0.10852
347.8	0.10497	347.8	0.10497	347.8	0.16321	347.8	0.10497	347.8	0.10497
348.6	0.1017	348.6	0.1017	348.6	0.13328	348.6	0.1017	348.6	0.1017
349.4	0.09867	349.4	0.09867	349.4	0.11488	349.4	0.09867	349.4	0.09867
350.2	0.09586	350.2	0.09586	350.2	0.1039	350.2	0.09586	350.2	0.09586
351	0.09325	351	0.09325	351	0.09717	351	0.09325	351	0.09325
351.8	0.09082	351.8	0.09082	351.8	0.09271	351.8	0.09082	351.8	0.09082
352.6	0.08855	352.6	0.08855	352.6	0.08946	352.6	0.08855	352.6	0.08855
353.4	0.08642	353.4	0.08642	353.4	0.08686	353.4	0.08642	353.4	0.08642
354.2	0.08442	354.2	0.08442	354.2	0.08463	354.2	0.08442	354.2	0.08442
355	0.08254	355	0.08254	355	0.08264	355	0.08254	355	0.08254
355.8	0.08077	355.8	0.08077	355.8	0.08082	355.8	0.08077	355.8	0.08077
356.6	0.0791	356.6	0.0791	356.6	0.07913	356.6	0.0791	356.6	0.0791
357.4	0.07753	357.4	0.07753	357.4	0.07754	357.4	0.07753	357.4	0.07753
358.2	0.07603	358.2	0.07603	358.2	0.07604	358.2	0.07603	358.2	0.07603
359	0.07461	359	0.07461	359	0.07462	359	0.07461	359	0.07461
359.8	0.07327	359.8	0.07327	359.8	0.07327	359.8	0.07327	359.8	0.07327
360.6	0.07199	360.6	0.07199	360.6	0.07199	360.6	0.07199	360.6	0.07199
361.4	0.07077	361.4	0.07077	361.4	0.07077	361.4	0.07077	361.4	0.07077
362.2	0.06961	362.2	0.06961	362.2	0.06961	362.2	0.06961	362.2	0.06961
363	0.0685	363	0.0685	363	0.0685	363	0.0685	363	0.0685

Table S7: Data of Figure 4(a).

\square	experimental	step	linear	neg-exp	modified logistic
t^*	R^*				
0	1	\square	\square	\square	1
152	1	\square	\square	\square	1.00791
312	1	\square	\square	\square	1.00791
320	1	\square	1	\square	1.00791
472	1	1.0044	0.99736	0.9973	1.009
632	1.01	1.0044	0.99736	0.9973	1.05004
640	1.01	1.0044	0.99736	0.9973	1.05561
792	1.3	1.0044	1.00614	0.9973	1.33732
952	2.05	2.27384	2.45233	2.38009	2.00489
960	2.09	2.29678	2.46935	2.39929	2.04403
1112	2.68	2.60727	2.71301	2.66957	2.69988
1272	3	2.80116	2.87573	2.84615	3.01495
1280	3.01	2.80889	2.88234	2.85328	3.02317
1432	3.13	2.93214	2.98849	2.96733	3.12188
1592	3.18	3.0262	3.06986	3.05452	3.17115
1600	3.18	3.03018	3.07329	3.0582	3.17293
1752	3.2	3.09524	3.12895	3.11797	3.19877
1912	3.21	3.14559	3.17076	3.16327	3.21
1920	3.21	3.1477	3.17246	3.16512	3.21
2072	3.21	3.18096	3.19824	3.19367	3.21
2232	3.21	3.20354	3.21	3.21	3.21
2240	3.21	3.20435	3.21	3.21	3.21
2392	3.21	3.21	3.21	3.21	3.21
2552	3.21	3.21	3.21	3.21	3.21
2560	3.21	3.21	3.21	3.21	3.21
2712	3.21	3.21	3.21	3.21	3.21
2800	3.21	3.21	3.21	3.21	3.21

Table S8: Data of Figure 4(b).

t^*	experimental	step	linear	neg-exp	modified logistic
0	1	\square	\square	\square	1
152	1	\square	1.00024	0.99776	1.00222
312	1	\square	1.00024	0.99776	1.00222
320	1	\square	1.00024	0.99776	1.00222
472	1	0.99809	1.00024	0.99776	1.00336
632	1.01	0.99809	1.0321	1.01799	1.03243
640	1.02	0.99809	1.03607	1.0212	1.03543
792	1.17	0.99809	1.1553	1.13075	1.16798
952	1.41	1.47334	1.53909	1.5166	1.41742
960	1.42	1.47678	1.54157	1.51955	1.42831
1112	1.57	1.53298	1.58344	1.5687	1.56676
1272	1.64	1.57769	1.61813	1.60849	1.62542
1280	1.64	1.57962	1.61964	1.61021	1.62733
1432	1.67	1.61186	1.64489	1.63872	1.65499
1592	1.68	1.63813	1.66496	1.66122	1.67341
1600	1.68	1.63927	1.66581	1.66216	1.67414
1752	1.69	1.65815	1.67922	1.67718	1.68506
1912	1.69	1.67297	1.68822	1.68737	1.69
1920	1.69	1.67359	1.68854	1.68774	1.69
2072	1.69	1.68329	1.69	1.69	1.69
2232	1.69	1.68955	1.69	1.69	1.69
2240	1.69	1.68976	1.69	1.69	1.69
2392	1.69	1.69	1.69	1.69	1.69
2552	1.69	1.69	1.69	1.69	1.69
2560	1.69	1.69	1.69	1.69	1.69
2712	1.69	1.69	1.69	1.69	1.69
2800	1.69	1.69	1.69	1.69	1.69

Table S9: Data of Figure 4(c-d).

Fig4(c)					Fig4(d)			
t^*	step	linear	neg-exp	modified logistic	step	linear	neg-exp	modified logistic
0	□	□	□	0	□	□	□	0
24	□	□	□	0.00791	□	□	□	0.00222
48	□	□	□	0.00791	□	□	□	0.00222
72	□	□	□	0.00791	□	□	□	0.00222
96	□	□	□	0.00791	□	0	□	0.00222
120	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
144	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
168	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
192	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
216	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
240	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
264	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
288	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
312	□	□	□	0.00791	□	2.41E-04	0.00224	0.00222
336	□	0.00264	□	0.00791	□	2.41E-04	0.00224	0.00222
360	□	0.00264	0.0027	0.00791	□	2.41E-04	0.00224	0.00222
384	□	0.00264	0.0027	0.00791	1.15E-08	2.41E-04	0.00224	0.00222
408	□	0.00264	0.0027	0.00791	0.00191	2.41E-04	0.00224	0.00222
432	□	0.00264	0.0027	0.00791	0.00191	2.40E-04	0.00224	0.00222
456	0.00438	0.00264	0.0027	0.00791	0.00192	2.34E-04	0.00224	0.00221
480	0.0044	0.00264	0.0027	0.00982	0.00195	2.05E-04	0.00227	0.00418
504	0.00439	0.00265	0.00271	0.01247	0.00205	9.95E-05	0.00238	0.00675
528	0.00433	0.00271	0.00277	0.0156	0.00237	2.18E-04	0.0027	0.0094
552	0.00411	0.00293	0.003	0.01947	0.00318	0.00102	0.0035	0.01205
576	0.00339	0.00365	0.00371	0.02437	0.00495	0.00449	0.00435	0.01448
600	0.00146	0.00558	0.00564	0.03049	0.00835	0.01098	7.43E-05	0.01638
624	0.00296	0.01	0.01007	0.03774	0.01422	0.01594	0.00261	0.01739
648	0.0118	0.01887	0.01894	0.04563	0.02342	0.01868	0.00303	0.0172
672	0.0277	0.03473	0.03479	0.05321	0.03669	0.01868	7.04E-04	0.01572
696	0.0533	0.06034	0.06041	0.05911	0.05454	0.01572	0.00452	0.01308
720	0.0913	0.09829	0.09836	0.06176	0.07711	0.01007	0.01226	0.00969
744	0.143	0.15047	0.15054	0.05981	0.10416	0.00251	0.02155	0.0061
768	0.211	0.21773	0.2178	0.05257	0.13515	0.00556	0.03062	0.00291
792	0.293	0.29096	0.2998	0.04022	0.16927	0.01206	0.0366	6.27E-04
816	0.388	0.36285	0.39286	0.0239	0.20559	0.01389	0.0346	4.30E-04
840	0.494	0.43621	0.47664	0.00548	0.24313	0.00611	0.0145	1.83E-04
864	0.609	0.49787	0.55263	0.01281	0.15253	0.02077	0.05383	0.00119
888	0.728	0.50025	0.58015	0.02873	0.12737	0.09172	0.17508	0.0033

912	0.289	0.50385	0.41875	0.04043	0.10281	0.17374	0.14872	0.00565
936	0.251	0.44264	0.36569	0.04665	0.07941	0.14714	0.12367	0.00773
960	0.206	0.37838	0.30832	0.04694	0.05757	0.12237	0.10035	0.0091
984	0.157	0.314	0.24982	0.04168	0.03758	0.09965	0.07898	0.00953
1008	0.108	0.25169	0.19257	0.03197	0.01957	0.07911	0.05972	0.00894
1032	0.0602	0.19298	0.13826	0.01947	0.0036	0.0608	0.0426	0.00741
1056	0.0155	0.13888	0.08802	0.00601	0.01035	0.04466	0.02758	0.00513
1080	0.0252	0.08996	0.04252	0.00666	0.02236	0.03062	0.01458	0.00234
1104	0.0615	0.04649	0.0021	0.0172	0.03253	0.01854	0.00348	7.20E-04
1128	0.0931	0.00846	0.03318	0.0248	0.04101	0.00827	0.00587	0.00383
1152	0.12	0.0243	0.06346	0.02923	0.04795	3.48E-04	0.01362	0.00683
1176	0.143	0.05208	0.08898	0.03069	0.05349	0.00748	0.01993	0.00958
1200	0.161	0.07523	0.11007	0.02969	0.05778	0.01328	0.02496	0.01199
1224	0.176	0.09418	0.12713	0.02684	0.06099	0.0179	0.02887	0.01403
1248	0.187	0.10933	0.14053	0.02279	0.06323	0.0215	0.03178	0.01566
1272	0.196	0.12111	0.15069	0.0181	0.06464	0.0242	0.03383	0.0169
1296	0.201	0.12992	0.15799	0.01322	0.06533	0.02612	0.03515	0.01776
1320	0.204	0.13613	0.16279	0.00849	0.0654	0.02738	0.03584	0.01826
1344	0.205	0.14009	0.16543	0.00415	0.06496	0.02807	0.03599	0.01845
1368	0.205	0.14211	0.16623	3.45E-04	0.06408	0.02829	0.03569	0.01835
1392	0.203	0.1425	0.16545	0.00285	0.06283	0.0281	0.03502	0.018
1416	0.199	0.1415	0.16335	0.00542	0.06128	0.02759	0.03405	0.01745
1440	0.195	0.13934	0.16016	0.00736	0.05949	0.0268	0.03282	0.01672
1464	0.19	0.13622	0.15605	0.00872	0.05751	0.02579	0.0314	0.01584
1488	0.184	0.13231	0.15122	0.00955	0.05537	0.0246	0.02982	0.01486
1512	0.177	0.12778	0.1458	0.00989	0.05312	0.02328	0.02813	0.01378
1536	0.17	0.12275	0.13992	0.00983	0.05078	0.02186	0.02636	0.01265
1560	0.163	0.11734	0.13371	0.00941	0.04839	0.02037	0.02454	0.01147
1584	0.156	0.11165	0.12725	0.00871	0.04596	0.01884	0.02268	0.01027
1608	0.148	0.10577	0.12062	0.00777	0.04352	0.01728	0.02082	0.00907
1632	0.141	0.09976	0.1139	0.00666	0.04108	0.01571	0.01897	0.00787
1656	0.133	0.09369	0.10715	0.00541	0.03866	0.01415	0.01715	0.0067
1680	0.126	0.08761	0.10042	0.00408	0.03627	0.01262	0.01536	0.00556
1704	0.118	0.08157	0.09375	0.0027	0.03392	0.01113	0.01362	0.00447
1728	0.111	0.07561	0.08717	0.00131	0.03161	0.00968	0.01194	0.00343
1752	0.103	0.06975	0.08073	6.55E-05	0.02936	0.00829	0.01033	0.00245
1776	0.0964	0.06403	0.07444	0.00139	0.02717	0.00696	0.00879	0.00153
1800	0.0895	0.05847	0.06833	0.00265	0.02505	0.0057	0.00734	6.84E-04
1824	0.0828	0.05308	0.0624	0.00382	0.023	0.00451	0.00596	8.66E-05
1848	0.0764	0.04789	0.05669	0.00488	0.02102	0.00341	0.00468	7.77E-04
1872	0.0701	0.04289	0.05119	0.00537	0.01911	0.00238	0.00348	0.00118
1896	0.0641	0.03811	0.04593	0.00462	0.01728	0.00144	0.00238	0.00102
1920	0.0583	0.03356	0.04089	0.00398	0.01554	5.86E-04	0.00138	8.78E-04

1944	0.0528	0.02923	0.0361	0.00343	0.01387	1.77E-04	4.80E-04	7.56E-04
1968	0.0475	0.02514	0.03156	0.00295	0.01228	6.51E-04	3.21E-04	6.51E-04
1992	0.0425	0.02129	0.02726	0.00255	0.01078	5.61E-04	5.61E-04	5.61E-04
2016	0.0377	0.01768	0.02322	0.00219	0.00936	4.83E-04	4.83E-04	4.83E-04
2040	0.0331	0.01432	0.01943	0.00189	0.00802	4.16E-04	4.16E-04	4.16E-04
2064	0.0289	0.0112	0.0159	0.00163	0.00677	3.59E-04	3.59E-04	3.59E-04
2088	0.0248	0.00833	0.01263	0.0014	0.0056	3.09E-04	3.09E-04	3.09E-04
2112	0.0211	0.00571	0.00961	0.00121	0.00451	2.66E-04	2.66E-04	2.66E-04
2136	0.0175	0.00334	0.00684	0.00104	0.00351	2.29E-04	2.29E-04	2.29E-04
2160	0.0142	0.00122	0.00434	8.96E-04	0.00259	1.97E-04	1.97E-04	1.97E-04
2184	0.0112	6.48E-04	0.00209	7.72E-04	0.00175	1.70E-04	1.70E-04	1.70E-04
2208	0.00843	6.65E-04	9.86E-05	6.65E-04	9.98E-04	1.47E-04	1.47E-04	1.47E-04
2232	0.00589	5.73E-04	5.73E-04	5.73E-04	3.27E-04	1.26E-04	1.26E-04	1.26E-04
2256	0.0036	4.93E-04	4.93E-04	4.93E-04	1.09E-04	1.09E-04	1.09E-04	1.09E-04
2280	0.00155	4.25E-04	4.25E-04	4.25E-04	9.36E-05	9.36E-05	9.36E-05	9.36E-05
2304	2.51E-04	3.66E-04	3.66E-04	3.66E-04	8.06E-05	8.06E-05	8.06E-05	8.06E-05
2328	3.15E-04	3.15E-04	3.15E-04	3.15E-04	6.95E-05	6.95E-05	6.95E-05	6.95E-05
2352	2.71E-04	2.71E-04	2.71E-04	2.71E-04	5.98E-05	5.98E-05	5.98E-05	5.98E-05
2376	2.34E-04	2.34E-04	2.34E-04	2.34E-04	5.15E-05	5.15E-05	5.15E-05	5.15E-05
2400	2.01E-04	2.01E-04	2.01E-04	2.01E-04	4.44E-05	4.44E-05	4.44E-05	4.44E-05
2424	1.74E-04	1.74E-04	1.74E-04	1.74E-04	3.82E-05	3.82E-05	3.82E-05	3.82E-05
2448	1.49E-04	1.49E-04	1.49E-04	1.49E-04	3.29E-05	3.29E-05	3.29E-05	3.29E-05
2472	1.29E-04	1.29E-04	1.29E-04	1.29E-04	2.84E-05	2.84E-05	2.84E-05	2.84E-05
2496	1.11E-04	1.11E-04	1.11E-04	1.11E-04	2.44E-05	2.44E-05	2.44E-05	2.44E-05
2520	9.55E-05	9.55E-05	9.55E-05	9.55E-05	2.11E-05	2.11E-05	2.11E-05	2.11E-05
2544	8.23E-05	8.23E-05	8.23E-05	8.23E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05
2568	7.09E-05	7.09E-05	7.09E-05	7.09E-05	1.56E-05	1.56E-05	1.56E-05	1.56E-05
2592	6.10E-05	6.10E-05	6.10E-05	6.10E-05	1.35E-05	1.35E-05	1.35E-05	1.35E-05
2616	5.26E-05	5.26E-05	5.26E-05	5.26E-05	1.16E-05	1.16E-05	1.16E-05	1.16E-05
2640	4.53E-05	4.53E-05	4.53E-05	4.53E-05	9.98E-06	9.98E-06	9.98E-06	9.98E-06
2664	3.90E-05	3.90E-05	3.90E-05	3.90E-05	8.60E-06	8.60E-06	8.60E-06	8.60E-06
2688	3.36E-05	3.36E-05	3.36E-05	3.36E-05	7.41E-06	7.41E-06	7.41E-06	7.41E-06
2712	2.89E-05	2.89E-05	2.89E-05	2.89E-05	6.38E-06	6.38E-06	6.38E-06	6.38E-06
2736	2.49E-05	2.49E-05	2.49E-05	2.49E-05	5.49E-06	5.49E-06	5.49E-06	5.49E-06
2760	2.15E-05	2.15E-05	2.15E-05	2.15E-05	4.73E-06	4.73E-06	4.73E-06	4.73E-06
2784	1.85E-05	1.85E-05	1.85E-05	1.85E-05	4.08E-06	4.08E-06	4.08E-06	4.08E-06
2800	1.67E-05	1.67E-05	1.67E-05	1.67E-05	3.69E-06	3.69E-06	3.69E-06	3.69E-06

Table S10: Data of Figure 5(a).

data							<input type="checkbox"/>
T	ϕ_{eq}						<input type="checkbox"/>
328	0.586	0.586	0.586	0.586	0.586	0.586	<input type="checkbox"/>
333	0.52253	0.4916	0.53165	0.52116	0.49415	0.55678	<input type="checkbox"/>
338	0.48328	0.36621	0.50568	0.47896	0.34601	0.49185	<input type="checkbox"/>
340.5	0.40375	0.28892	0.35547	0.41559	0.31608	0.36965	<input type="checkbox"/>
343	0.16645	0.23042	0.20833	0.19351	0.2476	0.18856	<input type="checkbox"/>
345.5	0.11514	0.1781	0.13388	0.13966	0.17461	0.12384	<input type="checkbox"/>
353	0.09974	0.10285	0.10729	0.11111	0.09859	0.08613	<input type="checkbox"/>
355.5	0.0609	0.07352	0.0709	0.06947	0.07214	0.06082	<input type="checkbox"/>
358	0.05972	0.07106	0.0638	0.06363	0.06701	0.05576	<input type="checkbox"/>
T	ϕ_{eq}						<input type="checkbox"/>
328	0.586	0.586	0.586	0.586	0.586	0.586	<input type="checkbox"/>
333	0.51198	0.56331	0.52266	0.51591	0.51846	0.49183	<input type="checkbox"/>
338	0.47824	0.51559	0.36891	0.43489	0.4317	0.47046	<input type="checkbox"/>
340.5	0.42592	0.4994	0.30052	0.41153	0.39482	0.3965	<input type="checkbox"/>
343	0.28968	0.43723	0.25341	0.28262	0.34438	0.20075	<input type="checkbox"/>
345.5	0.23186	0.18965	0.21431	0.12279	0.15949	0.12665	<input type="checkbox"/>
353	0.10362	0.10908	0.08422	0.08428	0.10903	0.10317	<input type="checkbox"/>
355.5	0.05323	0.07928	0.06373	0.06133	0.08271	0.07773	<input type="checkbox"/>
358	0.04292	<input type="checkbox"/>	0.05164	0.05315	0.0641	0.07541	<input type="checkbox"/>
<input type="checkbox"/>	modified logistic	constant	Eqn. (24)	<input type="checkbox"/>	modified logistic	constant	Eqn. (24)
T	ϕ_{eq}			T	ϕ_{eq}		
328	0.58208	0.16869	0.58056	343.6	0.25413	0.09907	0.19625
329.2	0.58208	0.16869	0.57262	344.8	0.19513	0.09502	0.16272
330.4	0.58208	0.16869	0.56464	346	0.15134	0.09136	0.14341
331.6	0.58208	0.16869	0.55661	347.2	0.12188	0.08806	0.13078
332.8	0.58208	0.16869	0.5484	348.4	0.10341	0.08505	0.12097
334	0.57623	0.158	0.53977	349.6	0.09218	0.08231	0.1123
335.2	0.56788	0.14671	0.53008	350.8	0.08525	0.07979	0.10407
336.4	0.55629	0.1369	0.51773	352	0.08071	0.07748	0.09603
337.6	0.53806	0.12838	0.49908	353.2	0.07747	0.07534	0.08805
338.8	0.50803	0.12094	0.46686	354.4	0.07496	0.07336	0.08011
340	0.46122	0.11443	0.41147	355.6	0.07288	0.07152	0.07217
341.2	0.39752	0.10869	0.33296	356.8	0.07105	0.0698	0.06424
342.4	0.32462	0.1036	0.25346	358	0.06941	0.0682	0.05631

Table S11: Data of Figure 5(b-c).

Fig5(b)			Fig5(c)	
\square	modified logistic	Eqn. (24)	modified logistic	Eqn. (24)
T	ν^*	ν^*	$1/\nu^*$	$1/\nu^*$
328	0.23	0.22769	4.34783	4.39194
328.9	0.23	0.21884	4.34783	4.56958
329.8	0.23	0.21028	4.34783	4.75556
330.7	0.23	0.20199	4.34783	4.95076
331.6	0.23	0.19393	4.34783	5.15651
332.5	0.23	0.18604	4.34783	5.37522
333.4	0.22967	0.18094	4.35412	5.52677
334.3	0.2283	0.17887	4.38027	5.59072
335.2	0.22548	0.17592	4.43492	5.68432
336.1	0.22015	0.17135	4.54242	5.83609
337	0.21071	0.16382	4.74581	6.1042
337.9	0.19531	0.15132	5.12001	6.6083
338.8	0.1726	0.13163	5.79363	7.59682
339.7	0.14319	0.10434	6.98378	9.58435
340.6	0.11051	0.07363	9.04885	13.58096
341.5	0.07961	0.04713	12.5608	21.21979
342.4	0.05439	0.02941	18.3844	34.00514
343.3	0.03609	0.01949	27.71166	51.29971
344.2	0.02385	0.01435	41.92756	69.69475
345.1	0.0161	0.01166	62.12397	85.78611
346	0.01134	0.01015	88.21876	98.51249
346.9	0.00846	0.00921	118.1762	108.6188
347.8	0.00674	0.00852	148.3074	117.3187
348.7	0.00572	0.00796	174.8895	125.6376
349.6	0.00511	0.00745	195.7942	134.3167
350.5	0.00474	0.00695	210.817	143.904
351.4	0.00453	0.00646	220.9395	154.8606
352.3	0.0044	0.00596	227.4742	167.6472
353.2	0.00432	0.00547	231.5808	182.7942
354.1	0.00427	0.00498	234.12	200.9717
355	0.00424	0.00448	235.6757	223.0751
355.9	0.00423	0.00399	236.624	250.3492
356.8	0.00422	0.00351	237.2007	284.5829
357.7	0.00421	0.00304	237.5511	328.4374
358	0.00421	0.00289	237.6341	345.8459

Table S12: Data of Figure 6.

\square	Eqn. (24)	modified logistic	\square	Eqn. (24)	modified logistic
t^*	R^*		t^*	R^*	
0	1	1	1440	2.18	2.03
80	1.01158	0.99973	1520	2.18	2.03
160	1.02439	1.00245	1600	2.18	2.03
240	1.0422	1.01721	1680	2.18	2.03
320	1.09761	1.06248	1760	2.18	2.03
400	1.28728	1.19085	1840	2.18	2.03
480	1.51552	1.41603	1920	2.18	2.03
560	1.63652	1.66109	2000	2.18	2.03
640	1.71773	1.82711	2080	2.18	2.03
720	1.79719	1.91264	2160	2.18	2.03
800	1.88454	1.95969	2240	2.18	2.03
880	1.98367	1.99149	2320	2.18	2.03
960	2.09811	2.01643	2400	2.18	2.03
1040	2.18	2.03	2480	2.18	2.03
1120	2.18	2.03	2560	2.18	2.03
1200	2.18	2.03	2640	2.18	2.03
1280	2.18	2.03	2720	2.18	2.03
1360	2.18	2.03	2800	2.18	2.03

Table S13: Data of Figure 7(a).

\square	a=0.3	a=0.5	a=0.7	a=0.9
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0
114	-0.00374	-0.00347	-0.00347	-0.00347
234	-0.00374	-0.00347	-0.00347	-0.00347
240	-0.00374	-0.00347	-0.00347	-0.00347
354	-0.00374	-0.00347	-0.00347	-0.00347
474	-0.00118	-0.00108	-0.00106	-0.00104
480	-1.49E-04	-1.01E-04	-5.83E-05	-9.86E-06
594	0.022	0.02623	0.03845	0.06275
714	0.05938	0.11696	0.26212	0.46129
720	0.06197	0.12501	0.28084	0.48453
834	0.13152	0.34822	0.62702	0.7316
954	0.25407	0.62188	0.78852	0.80731
960	0.26146	0.63325	0.79288	0.81006
1074	0.41604	0.79053	0.85227	0.85557
1194	0.58434	0.87223	0.89348	0.89417

1200	0.59231	0.87509	0.89526	0.8959
1314	0.7284	0.9176	0.92539	0.92556
1434	0.83599	0.94768	0.95076	0.95081
1440	0.84042	0.94894	0.95187	0.95193
1554	0.91008	0.96937	0.97062	0.97063
1674	0.95873	0.98509	0.98555	0.98556
1680	0.96063	0.98574	0.98618	0.98618
1794	0.98898	0.99584	0.99595	0.99595
1914	1	1	1	1
1920	1	1	1	1
2034	1	1	1	1
2154	1	1	1	1
2160	1	1	1	1
2274	1	1	1	1
2394	1	1	1	1
2400	1	1	1	1

Table S14: Data of Figure 7(b).

\square	a=0.3	\square	a=0.5	\square	a=0.7	\square	a=0.9
$k_G(t^* - t_G)$	$\frac{R - R_0}{R_f - R_0}$	$k_G(t^* - t_G)$	$\frac{R - R_0}{R_f - R_0}$	$k_G(t^* - t_G)$	$\frac{R - R_0}{R_f - R_0}$	$k_G(t^* - t_G)$	$\frac{R - R_0}{R_f - R_0}$
-641.7	0	-837	0	-1022.58	0	-1207.36	0
-580.32	-0.00374	-738	-0.00347	-885.96	0.00347	-1033.12	0.00347
-518.32	-0.00374	-638	-0.00347	-747.96	0.00347	-857.12	0.00347
-456.32	-0.00374	-538	-0.00347	-609.96	0.00347	-681.12	0.00347
-394.32	-0.00374	-438	-0.00347	-471.96	0.00347	-505.12	0.00347
-332.32	0.00406	-338	0.00399	-333.96	0.00429	-329.12	0.00469
-270.32	0.02434	-238	0.03006	-195.96	0.04638	-153.12	0.0794
-208.32	0.05526	-138	0.10444	-57.96	0.23211	22.88	0.42093
-146.32	0.10903	-38	0.2788	80.04	0.55075	198.88	0.69665
-84.32	0.19687	62	0.51573	218.04	0.74236	374.88	0.78204
-22.32	0.31842	162	0.70675	356.04	0.81999	550.88	0.82894
39.68	0.45895	262	0.81658	494.04	0.86378	726.88	0.86598
101.68	0.59758	362	0.87695	632.04	0.89643	902.88	0.89705
163.68	0.71775	462	0.91456	770.04	0.923	1078.88	0.92319
225.68	0.8125	562	0.9411	908.04	0.94496	1254.88	0.94503

287.68	0.88278	662	0.96115	1046.04	0.96297	1430.88	0.963
349.68	0.93299	762	0.97657	1184.04	0.97741	1606.88	0.97742
411.68	0.96779	862	0.98821	1322.04	0.98856	1782.88	0.98857
473.68	0.99083	962	0.99653	1460.04	0.99662	1958.88	0.99662
535.68	1	1062	1	1598.04	1	2134.88	1
597.68	1	1162	1	1736.04	1	2310.88	1
659.68	1	1262	1	1874.04	1	2486.88	1
721.68	1	1362	1	2012.04	1	2662.88	1
783.68	1	1462	1	2150.04	1	2838.88	1
845.68	1	1562	1	2288.04	1	3014.88	1
846.3	1	1563	1	2289.42	1	3016.64	1

Table S15: Data of Figure 7(c).

v_∞	3.80E-04	7.70E-04	0.0025	0.0042
a	0.61645	0.58471	0.5353	0.51459

Table S16: Data of Figure 7(d).

\square	a=0.51	a=0.54	a=0.58	a=0.62
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0
152	-0.0023	-0.00192	-0.00132	-0.00107
312	-0.0023	-0.00192	-0.00132	-0.00107
320	-0.0023	-0.00192	-0.00132	-0.00107
472	-0.00114	-9.46E-04	-6.50E-04	-5.28E-04
632	0.02966	0.02624	0.02083	0.01865
640	0.03299	0.02933	0.02353	0.02121
792	0.18913	0.17759	0.15793	0.1496
952	0.5314	0.51316	0.47527	0.45628
960	0.54884	0.53095	0.49333	0.47428
1112	0.79484	0.79033	0.77778	0.77019
1272	0.90178	0.90343	0.90607	0.90746
1280	0.90501	0.90674	0.90959	0.91109
1432	0.94927	0.95105	0.95441	0.95617
1592	0.97647	0.97746	0.97932	0.98027
1600	0.97751	0.97846	0.98025	0.98116
1752	0.99306	0.99338	0.99396	0.99425
1912	1	1	1	1
1920	1	1	1	1
2072	1	1	1	1
2232	1	1	1	1
2240	1	1	1	1
2392	1	1	1	1

2552	1	1	1	1
2560	1	1	1	1
2712	1	1	1	1
2800	1	1	1	1

Table S17: Data of Figure 8(a).

\square	$\nu_\infty = 0.00038$	$\nu_\infty = 0.00077$	$\nu_\infty = 0.0025$	$\nu_\infty = 0.012$
t^*	R^*			
0	1	1	1	1
152	0.99759	0.99759	0.99759	0.99761
312	0.99759	0.99759	0.99759	0.99761
320	0.99759	0.99759	0.99759	0.99761
472	0.99881	0.99881	0.99881	0.99881
632	1.03023	1.03022	1.03008	1.02917
640	1.03355	1.03354	1.03338	1.03232
792	1.19059	1.19004	1.18714	1.17139
952	1.60514	1.59592	1.55813	1.42374
960	1.63182	1.62143	1.57935	1.43435
1112	2.19016	2.12227	1.92677	1.56666
1272	2.70699	2.50356	2.10922	1.62333
1280	2.72695	2.51649	2.11467	1.62523
1432	2.99656	2.68159	2.18521	1.65332
1592	3.12782	2.76036	2.2237	1.67251
1600	3.13205	2.76298	2.22511	1.67327
1752	3.18842	2.79907	2.24556	1.68478
1912	3.21	2.81361	2.25443	1.69
1920	3.21	2.81361	2.25443	1.69
2072	3.21	2.81361	2.25443	1.69
2232	3.21	2.81361	2.25443	1.69
2240	3.21	2.81361	2.25443	1.69
2392	3.21	2.81361	2.25443	1.69
2552	3.21	2.81361	2.25443	1.69
2560	3.21	2.81361	2.25443	1.69
2712	3.21	2.81361	2.25443	1.69
2800	3.21	2.81361	2.25443	1.69

Table S18: Data of Figure 8(b).

ν_∞	$\frac{R_f}{R_0}$
0.012	1.69
0.0025	2.25443

7.70E-04	2.81361
3.80E-04	3.21

Table S19: Data of Figure 9(a).

	$\phi_0 = 0.5$	$\phi_0 = 0.55$	$\phi_0 = 0.6$	$\phi_0 = 0.65$
t^*	$\frac{R - R_0}{R_f - R_0}$			
100	-0.00413	-0.0038	-0.00354	-0.00332
200	-0.00413	-0.0038	-0.00354	-0.00332
300	-0.00413	-0.0038	-0.00354	-0.00332
400	-0.00413	-0.0038	-0.00354	-0.00332
500	0.00792	0.00541	0.00356	0.00217
600	0.0454	0.03579	0.02842	0.02261
700	0.14048	0.11869	0.10078	0.08578
800	0.343	0.30569	0.2716	0.24067
900	0.57895	0.54458	0.50713	0.4681
1000	0.73906	0.72317	0.70146	0.67438
1100	0.826	0.82239	0.81478	0.80297
1200	0.87707	0.87809	0.87679	0.87311
1300	0.91201	0.91415	0.91494	0.91441
1400	0.93835	0.94038	0.94159	0.94203
1500	0.95898	0.96053	0.96157	0.96217
1600	0.97516	0.97616	0.97688	0.97734
1700	0.9875	0.98802	0.98841	0.98867
1800	0.99635	0.99651	0.99662	0.99671
1900	1	1	1	1
2000	1	1	1	1
2100	1	1	1	1
2200	1	1	1	1
2300	1	1	1	1
2400	1	1	1	1

Table S20: Data of Figure 9(b).

	$\phi_0 = 0.5$		$\phi_0 = 0.55$		$\phi_0 = 0.6$		$\phi_0 = 0.65$	
$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	
-710	-0.00413	-726	-0.0038	-742	-0.00354	-757	-0.00332	
-610	-0.00413	-626	-0.0038	-642	-0.00354	-657	-0.00332	

-510	-0.00413	-526	-0.0038	-542	-0.00354	-557	-0.00332
-410	-0.00413	-426	-0.0038	-442	-0.00354	-457	-0.00332
-310	0.00792	-326	0.00541	-342	0.00356	-357	0.00217
-210	0.0454	-226	0.03579	-242	0.02842	-257	0.02261
-110	0.14048	-126	0.11869	-142	0.10078	-157	0.08578
-10	0.343	-26	0.30569	-42	0.2716	-57	0.24067
90	0.57895	74	0.54458	58	0.50713	43	0.4681
190	0.73906	174	0.72317	158	0.70146	143	0.67438
290	0.826	274	0.82239	258	0.81478	243	0.80297
390	0.87707	374	0.87809	358	0.87679	343	0.87311
490	0.91201	474	0.91415	458	0.91494	443	0.91441
590	0.93835	574	0.94038	558	0.94159	543	0.94203
690	0.95898	674	0.96053	658	0.96157	643	0.96217
790	0.97516	774	0.97616	758	0.97688	743	0.97734
890	0.9875	874	0.98802	858	0.98841	843	0.98867
990	0.99635	974	0.99651	958	0.99662	943	0.99671
1090	1	1074	1	1058	1	1043	1
1190	1	1174	1	1158	1	1143	1
1290	1	1274	1	1258	1	1243	1
1390	1	1374	1	1358	1	1343	1
1490	1	1474	1	1458	1	1443	1
1590	1	1574	1	1558	1	1543	1

Table S21: Data of Figure 9(c).

	$\nu_\infty = 0.00038$	$\nu_\infty = 0.00077$	$\nu_\infty = 0.0025$	$\nu_\infty = 0.012$
ϕ_0	t_G			
0.5	968	932	877	810
0.55	989	953	895	826
0.6	1010	973	914	842
0.65	1031	993	932	857

Table S22: Data of Figure 9(d).

$\nu_\infty^{-k_2} \phi_0$	t_G		$\nu_\infty^{-k_2} \phi_0$	t_G	
	Eqn.(31)	data in Fig9 (c)		Eqn.(31)	data in Fig9 (c)
2.65495	960.7695	968	1.78077	868.9804	877
2.92044	988.6464	989	1.95884	887.6784	895
3.18594	1016.523	1010	2.13692	906.3765	914
3.45143	1044.4	1031	2.315	925.0745	932
2.28578	922.0067	932	1.27698	816.0827	810

2.51436	946.0073	953	1.40468	829.491	826
2.74293	970.008	973	1.53237	842.8993	842
2.97151	994.0086	993	1.66007	856.3076	857

Table S23: Data of Figure 10(a).

	$T_g = 327$	$T_g = 331$	$T_g = 335$	$T_g = 339$
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0
100	-9.51E-04	-9.86E-04	-0.00103	-0.00109
200	0.00625	-9.86E-04	-0.00103	-0.00109
300	0.03235	0.0048	-0.00103	-0.00109
400	0.11953	0.02382	0.00312	-0.00109
500	0.28871	0.08859	0.01596	0.00133
600	0.51559	0.22319	0.05895	0.0098
700	0.71965	0.4188	0.15729	0.03494
800	0.83498	0.63004	0.312	0.09888
900	0.88828	0.7873	0.5026	0.21008
1000	0.91716	0.87195	0.68512	0.36049
1100	0.93679	0.91472	0.81571	0.53007
1200	0.95198	0.93969	0.89079	0.68853
1300	0.96435	0.95683	0.93203	0.80981
1400	0.97454	0.96977	0.95656	0.88901
1500	0.98288	0.97989	0.97269	0.93713
1600	0.98957	0.98783	0.98403	0.96635
1700	0.99473	0.99388	0.99214	0.98448
1800	0.99846	0.99821	0.99773	0.99572
1900	1	1	1	1
2000	1	1	1	1
2100	1	1	1	1
2200	1	1	1	1
2300	1	1	1	1
2400	1	1	1	1

Table S24: Data of Figure 10(b).

	$T_g = 327$	$T_g = 331$	$T_g = 335$	$T_g = 339$			
$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$
-537	0	-676	0	-831	0	-1004	0

-437	-9.51E-04	-576	-9.86E-04	-731	-0.00103	-904	-0.00109
-337	0.00625	-476	-9.86E-04	-631	-0.00103	-804	-0.00109
-237	0.03235	-376	0.0048	-531	-0.00103	-704	-0.00109
-137	0.11953	-276	0.02382	-431	0.00312	-604	-0.00109
-37	0.28871	-176	0.08859	-331	0.01596	-504	0.00133
63	0.51559	-76	0.22319	-231	0.05895	-404	0.0098
163	0.71965	24	0.4188	-131	0.15729	-304	0.03494
263	0.83498	124	0.63004	-31	0.312	-204	0.09888
363	0.88828	224	0.7873	69	0.5026	-104	0.21008
463	0.91716	324	0.87195	169	0.68512	-4	0.36049
563	0.93679	424	0.91472	269	0.81571	96	0.53007
663	0.95198	524	0.93969	369	0.89079	196	0.68853
763	0.96435	624	0.95683	469	0.93203	296	0.80981
863	0.97454	724	0.96977	569	0.95656	396	0.88901
963	0.98288	824	0.97989	669	0.97269	496	0.93713
1063	0.98957	924	0.98783	769	0.98403	596	0.96635
1163	0.99473	1024	0.99388	869	0.99214	696	0.98448
1263	0.99846	1124	0.99821	969	0.99773	796	0.99572
1363	1	1224	1	1069	1	896	1
1463	1	1324	1	1169	1	996	1
1563	1	1424	1	1269	1	1096	1
1663	1	1524	1	1369	1	1196	1
1763	1	1624	1	1469	1	1296	1
1863	1	1724	1	1569	1	1396	1

Table S25: Data of Figure 10(c).

\square	$\nu_{\infty} = 0.00038$	$\nu_{\infty} = 0.00077$	$\nu_{\infty} = 0.0025$	$\nu_{\infty} = 0.012$
$T_g - T_0$	t_G			
4	537	510	468	418
8	676	646	600	545
12	831	797	746	684
16	1004	967	908	837

Table S26: Data of Figure 11(a).

\square	$T_0 = 323$	$T_0 = 327$	$T_0 = 331$	$T_0 = 335$
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0

100	-0.00347	-0.00347	-0.00347	-0.00347
200	-0.00347	-0.00347	-0.00347	0.02078
300	-0.00347	-0.00347	0.01578	0.10615
400	-0.00347	0.0101	0.07737	0.35905
500	0.00417	0.05109	0.2711	0.66704
600	0.03047	0.18151	0.56679	0.83568
700	0.10564	0.43199	0.7761	0.91284
800	0.28103	0.67582	0.87565	0.96054
900	0.51802	0.81603	0.92978	0.99729
1000	0.70822	0.88726	0.96763	1
1100	0.81737	0.93039	0.99775	1
1200	0.87741	0.96158	1	1
1300	0.91486	0.98623	1	1
1400	0.94133	1	1	1
1500	0.96132	1	1	1
1600	0.9767	1	1	1
1700	0.98831	1	1	1
1800	0.99659	1	1	1
1900	1	1	1	1
2000	1	1	1	1
2100	1	1	1	1
2200	1	1	1	1
2300	1	1	1	1
2400	1	1	1	1

Table S27: Data of Figure 11(b).

$T_0 = 323$		$T_0 = 327$		$T_0 = 331$		$T_0 = 335$	
$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$	$t^* - t_G$	$\frac{R - R_0}{R_f - R_0}$
-837	0	-677	0	-533	0	-403	0
-737	-0.00347	-577	-0.00347	-433	-0.00347	-303	-0.00347
-637	-0.00347	-477	-0.00347	-333	-0.00347	-203	0.02078
-537	-0.00347	-377	-0.00347	-233	0.01578	-103	0.10615
-437	-0.00347	-277	0.0101	-133	0.07737	-3	0.35905
-337	0.00417	-177	0.05109	-33	0.2711	97	0.66704
-237	0.03047	-77	0.18151	67	0.56679	197	0.83568
-137	0.10564	23	0.43199	167	0.7761	297	0.91284
-37	0.28103	123	0.67582	267	0.87565	397	0.96054
63	0.51802	223	0.81603	367	0.92978	497	0.99729
163	0.70822	323	0.88726	467	0.96763	597	1
263	0.81737	423	0.93039	567	0.99775	697	1

363	0.87741	523	0.96158	667	1	797	1
463	0.91486	623	0.98623	767	1	897	1
563	0.94133	723	1	867	1	997	1
663	0.96132	823	1	967	1	1097	1
763	0.9767	923	1	1067	1	1197	1
863	0.98831	1023	1	1167	1	1297	1
963	0.99659	1123	1	1267	1	1397	1
1063	1	1223	1	1367	1	1497	1
1163	1	1323	1	1467	1	1597	1
1263	1	1423	1	1567	1	1697	1
1363	1	1523	1	1667	1	1797	1
1463	1	1623	1	1767	1	1897	1
1563	1	1723	1	1867	1	1997	1

Table S28: Data of Figure 11(c).

\square	$\nu_{\infty} = 0.00038$	$\nu_{\infty} = 0.00077$	$\nu_{\infty} = 0.0025$	$\nu_{\infty} = 0.012$
$T_g - T_0$	t_G			
4	521	495	454	403
8	663	635	589	533
12	821	790	739	677
16	1004	967	908	837

Table S29: Data of Figure 12(a).

	$\Delta H = 1500$	$\Delta H = 10000$	$\Delta H = 15000$	$\Delta H = 100000$
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0
200	-0.00621	-0.00387	-0.00333	-0.00168
400	-0.00621	-0.00387	-0.00333	-0.00168
600	0.01969	0.02764	0.03165	0.08308
800	0.34001	0.28466	0.28074	0.35643
1000	0.80925	0.71544	0.70688	0.74298
1200	0.94579	0.88218	0.87646	0.89106
1400	0.97798	0.94371	0.94087	0.94813
1600	0.99163	0.97761	0.97654	0.97955
1800	0.99879	0.99672	0.99657	0.99703
2000	1	1	1	1
2200	1	1	1	1
2400	1	1	1	1

Table S30: Data of Figure 12(b).

\square	$\chi_0 = 0.35$	$\chi_0 = 0.4$	$\chi_0 = 0.45$	$\chi_0 = 0.5$
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0
200	-0.00312	-0.00326	-0.00343	-0.00362
400	-0.00312	-0.00326	-0.00343	-0.00362
600	0.02479	0.02633	0.02819	0.03046
800	0.26817	0.27249	0.27684	0.28107
1000	0.72171	0.71981	0.71542	0.7075
1200	0.90246	0.89615	0.88779	0.87662
1400	0.95709	0.95292	0.94765	0.94087
1600	0.98338	0.9816	0.97936	0.97651
1800	0.99759	0.99732	0.99699	0.99657
2000	1	1	1	1
2200	1	1	1	1
2400	1	1	1	1

Table S31: Data of Figure 12(c).

\square	Fig12(c)			
\square	$c = 0.09$	$c = 0.9$	$c = 9$	$c = 90$
t^*	$\frac{R - R_0}{R_f - R_0}$			
0	0	0	0	0
200	-0.00347	-0.00347	-0.00347	-0.00347
400	-0.00347	-0.00347	-0.00347	-0.00347
600	0.03047	0.03047	0.03047	0.03047
800	0.28103	0.28103	0.28103	0.28103
1000	0.70822	0.70822	0.70822	0.70822
1200	0.87741	0.87741	0.87741	0.87741
1400	0.94133	0.94133	0.94133	0.94133
1600	0.9767	0.9767	0.9767	0.9767
1800	0.99659	0.99659	0.99659	0.99659
2000	1	1	1	1

2200	1	1	1	1
2400	1	1	1	1

Table S32: Data of Figure 13.

t_G from simulation	t_G from Eqn.(39)	t_G from simulation	t_G from Eqn.(39)	t_G from simulation	t_G from Eqn.(39)	t_G from simulation	t_G from Eqn.(39)
968	932.6264	932	934.865	797	802.7382	663	686.6687
989	965.4174	810	809.9985	967	953.9173	821	837.8478
1010	998.2084	826	830.5267	468	448.8207	495	500.3799
1031	1030.999	842	851.0549	600	599.9998	635	651.559
932	902.6694	857	871.5831	746	751.1789	790	802.7382
953	932.4647	537	535.4896	908	902.3581	454	448.8207
973	962.26	676	686.6687	418	391.7696	589	599.9998
993	992.0553	831	837.8478	545	542.9487	739	751.1789
877	858.6769	1004	989.0269	684	694.1279	403	391.7696
895	884.0729	510	500.3799	837	845.307	533	542.9487
914	909.4689	646	651.559	521	535.4896	677	694.1279

Table S33: Data of Figure 14(a-b).

□	Fig14(a)				Fig14(b)			
	ratio=3.21				ratio=1.69			
□	parabolic	b=1/20	b=1/7	b=1	b=1/20	b=1/7	b=1	parabolic
t^*	$\frac{R - R_0}{R_f - R_0}$							
0	0	0	0	0	0	0	0	0
100	-0.00109	-0.00637	-0.00109	0.02634	-0.0078	-0.00347	0.08027	-0.00347
200	-0.00109	-0.00637	-0.00109	1	-0.0078	-0.00347	1	-0.00347
300	-0.00109	-0.00637	-0.00109	1	-0.0078	-0.00347	1	-0.00347
400	-0.00109	-0.00637	-0.00109	1	-0.0078	-0.00347	1	-0.00347
500	0.00133	-0.00637	-8.96E-04	1	-0.0078	-0.00286	1	0.00417
600	0.0098	-0.00637	0.00607	1	-0.0078	0.01897	1	0.03047
700	0.03494	-0.00637	0.02881	1	-0.0078	0.08759	1	0.10564
800	0.09888	-0.00637	0.11034	1	-0.0078	0.30969	1	0.28103
900	0.21008	-0.00637	0.29153	1	-0.0078	0.6364	1	0.51802
1000	0.36049	-0.00637	0.5695	1	-0.0078	0.8346	1	0.70822
1100	0.53007	-0.00637	0.83687	1	-0.0078	0.92342	1	0.81737
1200	0.68853	-0.00637	0.97269	1	-0.0078	0.98055	1	0.87741
1300	0.80981	-0.00637	1	1	-0.0078	1	1	0.91486

1400	0.88901	-0.00637	1	1	-0.0078	1	1	0.94133
1500	0.93713	0.00292	1	1	0.0035	1	1	0.96132
1600	0.96635	0.01583	1	1	0.01911	1	1	0.9767
1700	0.98448	0.03291	1	1	0.03954	1	1	0.98831
1800	0.99572	0.05853	1	1	0.06982	1	1	0.99659
1900	1	0.10039	1	1	0.11862	1	1	1
2000	1	0.17028	1	1	0.19875	1	1	1
2100	1	0.28289	1	1	0.32444	1	1	1
2200	1	0.45229	1	1	0.50475	1	1	1
2300	1	0.68903	1	1	0.73636	1	1	1
2400	1	1	1	1	1	1	1	1