Table 1: Log likelihood difference to Xiang's original model without IGC event

	Orignal($\tau = 0$)	Original	Homogenizing($\tau = 0$)	Homogenizing
YBL087C|YER117W	-1415.291	47.61120	4.2690670	77.70287
YBR191W|YPL079W	-1533.397	66.10229	1.4398734	93.51967
YDR418W|YEL054C	-1771.216	32.04014	6.1197990	66.48842
YER074W|YIL069C	-1361.553	109.58850	2.4961015	149.78506
YER102W|YBL072C	-2196.658	137.70209	5.6811225	210.27105
YER131W|YGL189C	-1220.877	15.69246	0.9681037	26.49067
YJL177W|YKL180W	-1873.678	36.61969	3.3151982	63.19903
YLR333C|YGR027C	-1345.646	83.64759	8.6968268	117.36143
YLR406C|YDL075W	-1195.082	16.98287	2.1710453	31.25964
YML026C|YDR450W	-1444.313	67.06717	3.4916066	107.37750
YMR142C|YDL082W	-2197.027	142.97640	2.7407108	195.17656
YMR143W|YDL083C	-1246.979	37.22932	0.2301552	48.05735
YNL069C|YIL133C	-2381.436	58.60724	7.3969424	90.84687
YNL301C|YOL120C	-2215.070	75.76272	14.2992730	142.80202

[a] column 1 is the log-likelihood of Xiang's original model when no IGC event
[b] column 2,3,4 are the log-likelihood from different model minus column 1

Table 2: Yeast data in homogenizing model (left two columns are omega value from Xiang's original model)

	$\omega_{Xiang}(\tau = 0)$	ω_{Xiang}	$\omega(\tau = 0)$	ω	$\omega_{homo}(\tau = 0)$	ω_{homo}
YBL087C|YER117W	0.0501835	0.0560125	0.0344152	0.0476106	0.1486233	4.267583
YBR191W|YPL079W	0.0745008	0.0927975	0.0616211	0.0741494	0.1331337	2.376804
YDR418W|YEL054C	0.0657367	0.0761819	0.0472974	0.0586073	0.1956581	3.392491
YER074W|YIL069C	0.1114456	0.1347958	0.0852852	0.1101637	0.2144116	7.745507
YER102W|YBL072C	0.1344739	0.1893864	0.1035332	0.1464481	0.2867003	4.203525
YER131W|YGL189C	0.0480913	0.0547472	0.0419952	0.0435486	0.1069096	1.285350
YJL177W|YKL180W	0.0833331	0.0952194	0.0675314	0.0757361	0.1922856	2.162597
YLR333C|YGR027C	0.1458594	0.1488952	0.1079309	0.1107074	0.5320698	1.794350
YLR406C|YDL075W	0.0746413	0.0856412	0.0616983	0.0759538	0.1940438	2.201414
YML026C|YDR450W	0.0590055	0.0737382	0.0417186	0.0691450	0.1413366	20.669946
YMR142C|YDL082W	0.1525492	0.2240833	0.1276874	0.1321572	0.2630772	1.581019
YMR143W|YDL083C	0.0211616	0.0243300	0.0186710	0.0242723	0.0339637	3.127465
YNL069C|YIL133C	0.1526547	0.1725505	0.1265653	0.1220085	0.4672969	1.070645
YNL301C|YOL120C	0.1097023	0.1267691	0.0766215	0.0921613	0.4540936	3.775036

[a] column 1 and 2 are omega values from Xiang's original model
[b] colum 3,4,5,6 are omega values frome the homogenizing model
[c] omega means the non-homogenizing omega
[d] omega_homo means the homogenizing omega

Table 3: Yeast data: tau value from different model

	τ_{Xiang}	τ_{homo}
YBL087C|YER117W	2.810249	3.423181
YBR191W|YPL079W	3.832101	4.034674
YDR418W|YEL054C	1.409428	1.902595
YER074W|YIL069C	7.468530	5.586358
YER102W|YBL072C	4.867152	3.579156
YER131W|YGL189C	1.357913	2.009551
YJL177W|YKL180W	1.765573	2.207274
YLR333C|YGR027C	3.281714	2.657503
YLR406C|YDL075W	1.652658	2.541288
YML026C|YDR450W	3.643633	3.652811
YMR142C|YDL082W	5.705848	4.320893
YMR143W|YDL083C	3.161876	3.753576
YNL069C|YIL133C	1.464768	1.361604
YNL301C|YOL120C	2.480315	2.014591

[a] column 1 is the tau value from Xiang's original model
[b] column 2 is the tau value from the homogenizing model